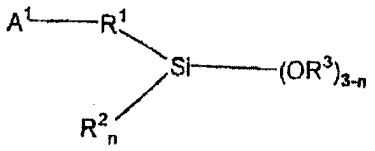
AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

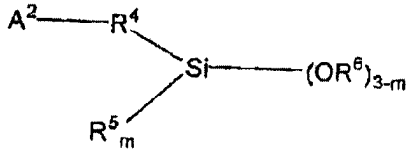
1. (Previously presented): A process for producing a modified polymer, comprising modifying a polymer produced by anionic polymerization using an alkaline metal compound and/or an alkaline earth metal compound as a polymerization initiator and having an active site of an organometal in a molecule by reacting the site thereof with a hydrocarbyloxysilane compound and adding a condensation accelerator to the reaction system in the middle of the above reaction and/or after completion thereof, where in the polymer described above is a polymer obtained by homopolymerizing a conjugated diene compound or copolymerizing a conjugated diene compound with at least one additional monomer and the hydrocarbyloxysilane compound described above used for the modification is at least one selected from a hydrocarbyloxysilane compound represented by Formula (I) and/or a partial condensation product thereof;



. . . (I)

(wherein A^1 represents a monovalent group having at least one functional group selected from (thio)epoxy, (thio)isocyanate, (thio)ketone, (thio)aldehyde, imine, amide, trihydrocarbyl isocyanurate, (thio)carboxylates, metal salts of (thio)carboxylates, carboxylic anhydrides, carboxylic halides and dihydrocarbyl carbonate; R^1 represents a single bond or a divalent inactive hydrocarbon group; R^2 and R^3 each represent independently a monovalent aliphatic

hydrocarbon group having 1 to 20 carbon atoms or a monovalent aromatic hydrocarbon group having 6 to 18 carbon atoms; n is an integer of 0 to 2, and when a plurality of OR^3 is present, a plurality OR^3 may be the same as or different from each other; and an active proton and an onium salt are not contained in the molecule), and a hydrocarbyloxysilane compound represented by Formula (II) and/or a partial condensation product thereof;



$$\cdots \text{(II)}$$

(wherein A^2 represents a monovalent group having at least on functional group selected from cyclic tertiary amine, non-cyclic tertiary amine, nitrile, pyridine, sulfide and multisulfide; R^4 represents a single bond or a divalent inactive hydrocarbon group; R^5 and R^6 each represent independently a monovalent aliphatic hydrocarbon group having 1 to 20 carbon atoms or a monovalent aromatic hydrocarbon group having 6 to 18 carbon atoms; m is an integer of 0 to 2, and when a plurality of OR^6 is present, a plurality OR^6 may be the same as or different from each other; and an active proton and an onium salt are not contained in the molecule).

Claim 2 (Canceled)

3. (Previously presented): The process for producing a modified polymer as described in claim 1, wherein the metal in the active site described above is at least one selected from alkaline metals and alkaline earth metals.

4. (Currently amended): The process for producing a modified polymer as described in ~~claim 3~~claim 1, wherein the at least one additional monomer is an aromatic vinyl compound.

5. (Original): The process for producing a modified polymer as described in claim 4, wherein the active site described above is present at an end of the polymer, and at least a part thereof stays in an active state.

Claim 6 (Canceled)

7. (Previously presented): The process for producing a modified polymer as described in claim 1, wherein the hydrocarbyloxysilane compound for modification is added to the polymer having an active site of an organometal in a molecule in a stoichiometric amount or an excess amount thereover based on the above active site to react the above active site with the hydrocarbyloxysilane compound.

8. (Previously presented): The process for producing a modified polymer as described in claim 1, wherein the condensation accelerator described above comprises combination of carboxylic acid salt of tin and/or titanium alkoxide with water.

9. (Original): The process for producing a modified polymer as described in claim 8, wherein the carboxylic acid salt of tin described above is a tin compound having an oxidation number of 2 represented by the following Formula (IV):

$$Sn(OCOR^9)_2 \qquad (IV)$$

(wherein R^9 is an alkyl group having 2 to 19 carbon atoms) or a tin compound having an oxidation number of 4 represented by the following Formula (V):

$$R^{10}{}_xSnA^3{}_yB^1{}_{4-y-x} \qquad (V)$$

(wherein R^{10} is an aliphatic hydrocarbon group having 1 to 30 carbon atoms; x is an integer of 1 to 3; y is 1 or 2; A^3 is a group selected from a carboxyl group having 2 to 30 carbon atoms, an α,γ-dionyl group having 5 to 20 carbon atoms, a hydrocarbyloxy group having 3 to 20 carbon atoms and a siloxy group tri-substituted with a hydrocarbyl group having 1 to 20 carbon

atoms and/or a hydrocarbyloxy group having 1 to 20 carbon atoms; and B^1 is a hydroxyl group or halogen), and the titanium alkoxide described above is a titanium compound by the following Formula (VI):

$$A^4{}_zTiB^2{}_{4-z} \qquad \text{(VI)}$$

(wherein A^4 is a group selected from an alkoxy group having 3 to 20 carbon atoms and a siloxy group tri-substituted with an alkyl group having 1 to 20 carbon atoms and/or an alkoxy group having 1 to 20 carbon atoms; B^2 is an α,γ-dionyl group having 5 to 20 carbon atoms; and z is 2 or 4).

10. (Currently amended): The process for producing a modified polymer as described in ~~claim 2~~claim 1, wherein the conjugated diene compound described above is 1,3-butadiene or isoprene.

11. (Previously presented): The process for producing a modified polymer as described in claim 4, wherein the aromatic vinyl compound described above is styrene.

12. (Previously presented): A modified polymer obtained by the production process as described in claim 1.

13. (Original): The modified polymer as described claim 12, having a Mooney viscosity (ML_{1+4}/100°C) of 10 to 150.

14. (Original): A rubber composition comprising the modified polymer as described in claim 12 or 13.

Claims 15-18 (Canceled)

19. (Previously presented): The rubber composition as described claim 14, comprising 100 parts by weight of (A) a rubber component containing at least 15 % by weight of the

modified polymer described above and 10 to 100 parts by weight of (B) an inorganic filler and/or carbon black.

20. (Original): The rubber composition as described claim 19, comprising 10 to 100 parts by weight of silica as the inorganic filler described above.

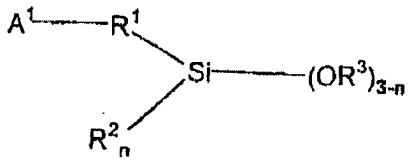
21. (Previously presented): A tire using the rubber composition as described in claim 14.

22. (previously presented): The process for producing a modified polymer as described in claim 1, wherein the anionic polymerization is conducted in the presence of a randomizer.

23. (Previously presented): The process for producing a modified polymer as described in claim 8, wherein the carboxylic acid salt of tin is tin bis(2-ethylhexanoate) and the titanium alkoxide is titanium tetrakis(2-ethylhexyl oxide).

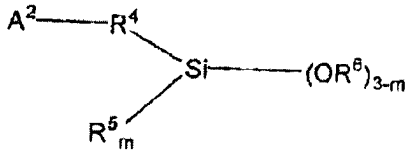
24. (Previously presented): The modified polymer as described in claim 12, having a weight average molecular weight (Mw) of 55.4×10^4 to 62.3×10^4.

25. (Currently amended): A rubber composition prepared by adding a condensation accelerator in blending to a modified polymer produced by anionic polymerization using an alkaline metal compound and/or an alkaline earth metal compound as a polymerization initiator and by reacting the active site of the polymer having an active site of the organometal in a molecule with a hydrocarbyloxysilane compound, wherein said modified polymer is a polymer obtained by homopolymerizing a conjugated diene compound or copolymerizing a conjugated diene compound with at least one additional monomer and the hydrocarbyloxysilane compound is at least one selected from the compounds represented by Formula (I):



. . . (I)

(wherein A^1 represents a monovalent group having at least one functional group selected from (thio)epoxy, (thio)isocyanate, (thio)ketone, (thio)aldehyde, imine, amide, trihydrocarbyl isocyanurate, (thio)carboxylates, metal salts of (thio)carboxylates, carboxylic anhydrides, carboxylic halides and dihydrocarbyl carbonate; R^1 represents a single bond or a divalent inactive hydrocarbon group; R^2 and R^3 each represent independently a monovalent aliphatic hydrocarbon group having 1 to 20 carbon atoms or a monovalent aromatic hydrocarbon group having 6 to 18 carbon atoms; n is an integer of 0 to 2, and when a plurality of OR^3 is present, a plurality OR^3 may be the same as or different from each other; and an active proton and an onium salt are not contained in the molecule), and Formula (II):



. . . (II)

(wherein A^2 represents a monovalent group having at least on functional group selected from cyclic tertiary amine, non-cyclic tertiary amine, nitrile, pyridine, sulfide and multisulfide; R^4 represents a single bond or a divalent inactive hydrocarbon group; R^5 and R^6 each represent independently a monovalent aliphatic hydrocarbon group having 1 to 20 carbon atoms or a monovalent aromatic hydrocarbon group having 6 to 18 carbon atoms; m is an integer of 0 to 2, and when a plurality of OR^6 is present, a plurality OR^6 may be the same as or different from each other; and an active proton and an onium salt are not contained in the molecule).

26. (Previously presented): The rubber composition as described in claim 25, wherein the at least one additional monomer is an aromatic vinyl compound.

27. (Previously presented): The rubber composition as described in claim 25, wherein the conjugated diene compound is selected from the group consisting of 1,3-butadiene and isoprene.

28. (Previously presented): The rubber composition as described in claim 26, wherein the aromatic vinyl compound is styrene.

29. (Previously presented): The rubber composition as described in claim 25, wherein the anionic polymerization is conducted in the presence of a randomizer.

30. (Previously presented): The rubber composition as described in claim 25, wherein the condensation accelerator comprises a combination of carboxylic acid salt of tin and/or titanium alkoxide with water.

31. (Currently amended): The rubber composition as described in claim 30, wherein the carboxylic acid salt of tin is a compound represented by Formula (IV):

$$Sn(OCOR^9)_2 \qquad (IV)$$

(wherein R^9 is an alkyl group having 2 to 19 carbon atoms) or a tin compound having an oxidation number of 4 represented by the following Formula (V):

$$R^{10}{}_xSnA^3{}_yB^1{}_{4-y-x} \qquad (V)$$

(wherein R^{10} is an aliphatic hydrocarbon group having 1 to 30 carbon atoms; x is an integer of 1 to 3; y is 1 or 2; A^3 is a group selected from a carboxyl group having 2 to 30 carbon atoms, an α,γ-dionyl group having 5 to 20 carbon atoms, a hydrocarbyloxy group having 3 to 20 carbon atoms and a siloxy group tri-substituted with a hydrocarbyl group having 1 to 20 carbon atoms and/or a hydrocarbyloxy group having 1 to 20 carbon atoms; and B^1 is a hydroxyl group or halogen),

and the titanium alkoxide is a compound represented by Formula (VI):

$A^4_zTiB^2_{4-z}$ (VI)

(wherein A^4 is a group selected from an alkoxy group having 3 to 20 carbon atoms and a siloxy group tri-substituted with an alkyl group having 1 to 20 carbon atoms and/or an alkoxy group having 1 to 20 carbon atoms; B^2 is an α,γ-dionyl group having 5 to 20 carbon atoms; and z is 2 or 4).

32. (Previously presented): The rubber composition as described in claim 30, wherein the carboxylic acid salt of tin is tin bis(2-ethylhexanoate) and the titanium alkoxide is titanium tetrakis(2-ethylhexyl oxide).

33. (Previously presented): The rubber composition as described claim 25, comprising 100 parts by weight of (A) a rubber component containing at least 15% by weight of the modified polymer and 10 to 100 parts by weight of (B) an inorganic filler and/or carbon black.

34. (Previously presented): The rubber composition as described claim 33, comprising 10 to 100 parts by weight of silica as the inorganic filler.

35. (Previously presented): A tire comprising the rubber composition as described in claim 25.